TEST BEFORE FLIGHT
ARNOLD AIR FORCE BASE, TENN.

HIGH MACH

Serving the World's Premier Flight Simulation Test Complex

HAP ARNOLD'S LEGACY
AN AIR FORCE SECOND TO NONE

PRSRT STD
US POSTAGE PAID
TULLAHOMA TN
PERMIT NO. 29

Vol. 62, No. 11 | Arnold AFB, Tenn. | June 11, 2015

AEDC Commander announces Test Operations and Support contractor

AEDC Commander, Col. Raymond Toth provided an update on AEDC's Source Selection efforts to the entire workforce via email on June 10 announcing the contractor which was selected to perform the Complex's Test Operations and Support contract.

Team AEDC,

Today, our Test Operations and Sustainment effort was awarded to National Aerospace Solutions, LLC (NAS), Reston, VA, a joint venture between Bechtel National, Inc., Sierra Lobo, Inc., and GP Strategies Corp., as a cost plus award fee contract valued at $1.5 billion. The period of performance is eight years – one base year, three one-year option periods, two one-year award term periods, and two additional one-year option periods – in addition to a 90-day phase-in period.

So, what's next?

The plan is for NAS to begin phase-in on July 1 with performance starting on Oct. 1.

Over the next week, each offeror can request a debriefing to receive feedback on our evaluation of their proposal. Then unsuccessful offerors may file a post-award protest in a variety of ways, each with differing timelines and processes. The most likely scenario is a protest to the Government Accountability Office (GAO). The GAO would then have up to 100 days to uphold or deny a protest.

Meanwhile, both the Facility Support Services (FSS) and Base Communications and Information Technology Services (BCITS) efforts are being reviewed by the Small Business Administration (SBA) due to pre-award protests; the SBA has up to 15-days to resolve those protests. Following pre-award protest resolution, the same scenario described above for post-award protests also applies.

We will keep you informed as these situations evolve. Ultimately, once we successfully award each contract there will be a 90-day phase-in/out period. That transition period could start any time on or after July 1 which means performance could potentially start later than Oct. 1. For this reason, we will extend the ATA contract past Oct. 1 to

See **CONTRACTOR**, page 2

AEDC wind tunnel modernization benefits from 'in-house' fabrication capabilities

By Raquel March
ATA Public Affairs

The four-foot transonic (4T) wind tunnel in the AEDC Propulsion Wind Tunnel (PWT) facility is benefitting from modern, state-of-the-art instrumentation partly due to the manufacturing capabilities of the Model Shop personnel at the Complex.

Known for aerodynamic and weapons integration testing of U.S. fighter aircraft, 4T is now equipped with a new roll mechanism and a new Captive Trajectory Support (CTS) system used to conduct staging or store separation testing that will handle higher loads needed to test today's modern aircraft and weapons systems.

New flexible nozzle actuators were also installed. The actuators are electro-mechanically driven ball-screw jacks which move the flexible top and bottom plates in the 4T tunnel providing variable Mach numbers or wind speeds. They will provide precision movement of the flexible plates and the ability to better handle the bending stresses and aerodynamic loads generated while testing.

Tom Hartvigsen (left), a test system designer with the ATA Technology and Engineering Analysis Branch, and Derrick Burton, a Model Shop machinist with the ATA Test Support Branch, assemble parts which were fabricated by the Shop for the new pitch boom mechanism for the Propulsion Wind Tunnel four-foot transonic wind tunnel (4T) Captive Trajectory Support (CTS) System. The pitch boom mechanism controls the pitch, yaw and roll movement of a bomb or missile when it separates from the aircraft during a flight simulation test at altitude conditions. *(Photo by Rick Goodfriend)*

Another upgrade to 4T's flow capability includes a new flexible nozzle actuator control system (NCS) like the system utilized in the complex's von Kármán Gas Dynamics Facility wind tunnel A which is equipped with a flexible nozzle as well.

The NCS also has a positioning program which provides closed-loop control for the nozzle actuators.

The Model Shop personnel were involved with each of these projects from field measurement work on some to fabrication and installation of the new CTS mechanism.

See **TUNNEL**, page 4

AEDC Commander announces 2015 Fellows

By Raquel March
ATA Public Affairs

AEDC leadership values the important contributions of past and present personnel and recognizes their accomplishments each year through the AEDC Fellow Program.

This year, Dr. John Felderman and Dr. Grant Patterson will be inducted as AEDC Fellows at the annual AEDC Fellows Banquet at the Arnold Lakeside Center on June 25 at 5:30 p.m. Dr. C. David Brown, the deputy assistant secretary of the Defense for Developmental Test and Evaluation and the director of the Test Resource Management Center, will be the speaker.

An AEDC Fellow is recognized for personally making sustained, notable and valuable contributions in aerospace ground testing at AEDC.

Peggy Gray, the first female selected as a Fellow, and Phil Tarver will be inducted as AEDC Lifetime Achievement Fellows recognizing their notable and valuable lifetime contributions to the AEDC mission.

Dr. John Felderman
AEDC Fellow

Felderman was selected as an AEDC Fellow due to his contributions to AEDC high-enthalpy testing and evaluations. He retired from AEDC in 2006 as a principal engineer and scientist whose service to AEDC spanned 30 years.

During his involvement with an undergraduate research fellowship in the 1960s sponsored by the National Science Foundation, Felderman adapted platinum thin-film resistance thermometers for shock sensing and heat transfer measurements in a shock tube which are still in use at the AEDC arc heater facilities. Also during this time he contributed to multiple research efforts in the high enthalpy flow area, supporting magnetohydrodynamics (MHD) development, arc heaters and wind tunnels at AEDC. The efforts

See **FELLOWS**, page 3

Pawlikowski assumes leadership of Air Force Materiel Command

By Kim Bowden
Air Force Materiel Command Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio – Gen. Ellen Pawlikowski assumed the top position of the major command responsible for installation support and the technology, acquisition, test and sustainment of the Air Force's current and future weapon systems during ceremonies at Wright-Patterson Air Force Base on June 8.

Pawlikowski took the reins of Air Force Materiel Command from Gen. Janet Wolfenbarger during a change of command held at the Air Force Institute of Technology's Kenney Auditorium.

Wolfenbarger, who had served as commander of AFMC since June 2012, retired after 35 years of service.

Air Force Chief of Staff Gen. Mark Welsh III presided over the ceremony and commented on the importance of the occasion.

"The fact that we're

See **COMMAND**, page 4

In the time-honored military tradition signifying assumption of command, Air Force Chief of Staff Gen. Mark. A. Welsh III (left) passes the Air Force Materiel Command guidon, or unit flag, to Gen. Ellen Pawlikowski. Pawlikowski assumed command of AFMC Jun. 8 in a ceremony at the Air Force Institute of Technology's Kenney Auditorium. *(U.S. Air Force photo/Wesley Farnsworth)*

In This Issue....

Blood Drive at AEDC
...Page 2

Turning challenges into opportunities hallmark of Wolfenbarger's tenure as AFMC commander
...Page 3

SUMMER BLOOD ASSURANCE KICKOFF JUNE1-5

HIGH MACH

Arnold Engineering Development Complex
An Air Force Materiel Command Test Complex

Col. Raymond Toth
Commander

Jason Austin
Chief, Public Affairs

Steve Pearson
General Manager, Aerospace Testing Alliance

High Mach Staff:
Kathy Gattis, ATA Public Affairs Manager & Executive Editor
Raquel March, Editor

High Mach is published by *The Tullahoma News*, a private firm in no way connected with the U.S. Air Force, Arnold Engineering Development Complex (AEDC) or Aerospace Testing Alliance (ATA), under exclusive written contract with ATA, complex support contractor, at Air Force Materiel Command's AEDC, Arnold AFB, Tenn., 37389.

Everything advertised in this publication will be made available for purchase, use or patronage without regard to race, color, religion, sex, national origin, age, marital status, physical handicap, political affiliation or any other non-merit factor of the purchaser, user or patron.

The *High Mach* office is located at 100 Kindel Drive, Suite B212, Arnold AFB, Tenn. 37389-2212. Editorial content is edited and prepared by AEDC support contractor ATA. Deadline for copy is Wednesday at close of business the week before publication.

This commercial enterprise newspaper is an allowable ATA contractor publication for personnel at AEDC.

The content of *High Mach* does not necessarily reflect the views of the Air Force, AEDC or ATA. The appearance of advertising in this publication does not constitute endorsement by the Department of Defense, the Department of the Air Force, AEDC, ATA or *The Tullahoma News* of the products or services advertised.

For advertising information, call (931) 455-4545.

For general information about *High Mach*, call (931) 454-5655 or visit *www.arnold.af.mil*.

The complex's vision: Be the nation's best value ground test and analysis source for aerospace and defense systems.

Core Values

• Integrity first
• Service before self
• Excellence in all we do

Vision

"ATA will be a trusted partner in delivering best value warfighter support and asset stewardship to AEDC"

Core Values

• Be accountable for our own actions
• Ensure the safety of individuals and equipment
• Demonstrate the highest integrity and ethical standards
• Communicate clearly and openly
• Deliver professional and technical excellence
• Nurture, enable and treat people fairly
• Align with customer goals and objectives
• Use disciplined and innovative processes
• Continually improve in all that we do

Remember boating safety this summer

By Arnold Police Department

The past couple of weekends of nice weather have seen an increase in activity on the area lakes. To help keep your outing safe and enjoyable, consider these things before you put your boat in the water.

The following items are required by law:

- Approved wearable flotation device for each person readily accessible
- Additional throwable flotation device on boats over 16 feet
- Persons 12 and under must wear a personal flotation device while underway
- Fire extinguisher if fuel tank or engine is enclosed
- Running lights after sunset or during restricted visibility
- State registration card on board
- Registration number and validation sticker displayed
- Do not operate a boat under the influence of drugs or alcohol
- Observe navigation rules
- Do not overload boat
- Sound signaling device

Any Tennessee resident born after Jan. 1, 1989 must show the TWRA-issued wallet Boating Safety Education Certificate as proof of successful completion of the TWRA Boating Safety exam. Contact TWRA at (615) 781-6682 for information on taking the exam.

Personal Watercraft Jet-Skis bring their own set of additional rules and regulations.

You Must:

- Wear a personal flotation device (life jacket). Type I, II, or III. Inflatables cannot be used.
- Be at least 12 years old unless an adult is on board who can take immediate control of the boat.
- If towing skiers, surfboards or other devices, be equipped with the appropriate mirrors

You May Not:

- Jump the immediate wake within 100 feet of another vessel
- Weave through congested vessel traffic
- Ride close to ramps, docks or the shore
- Operate a personal watercraft between sunset and sunrise

Make sure engines are off when someone is in the water around the boat. Each season many people are injured or killed by moving propellers and Carbon Monoxide poisoning from exhaust. Exhaust gathers at the rear of boat and can backdraft into enclosed areas.

Heavy drinking: Highway to disaster

By Paul Ahlberg and Capt. Sheontee Frank
81st Medical Operations Squadron, Alcohol and Drug Abuse Prevention and Treatment Program

KEESLER AIR FORCE BASE, Miss. (AFNS) – Heavy drinking is defined as consuming five or more standard drinks in one sitting. It is also considered "high risk" drinking due to the health concerns associated with drinking excessive amounts of alcohol. Many stories about heavy drinking are glamorized, not publicized, or forgotten altogether, so behaviors don't change.

Here's a story that illustrates the many problems and risks associated with heavy drinking. Can you pick them out? Have you been on the "Highway to Disaster?"

It was a perfect day on the Mississippi coast to take a swim in the pool, so a Keesler Air Force Base Airman decided to have a party one Sunday afternoon at his house. He invited some of his buddies over to join him – the more the merrier. Some of his buddies invited a few of their friends to the gathering, which quickly turned into a party. The Airman coordinated what everyone would bring, including a keg of beer, beer pong to play, and music to enjoy.

By 5 p.m., guests arrived and the designated keg operator was letting the beer pour freely for everyone who wanted it without verifying the ages of the guests. Other attendees brought hard liquor and many were taking shots between drinks and playing beer pong. The host was tired and had gotten a little too much sun, so he went into the house to take a short nap. Several guests were hungry so one the guests drove to get pizzas from a nearby restaurant. The impaired driver had a friend who had not been drinking as much ride along with him. The driver had done this before and had never been arrested for impaired driving.

A young female who had been playing beer pong was noticeably intoxicated near the pool. One of the guests asked her if she was OK, but she did not respond, so he yelled for someone to call 911. Some of the guests left in a hurry. Meanwhile, a neighbor called local law enforcement due to the loud music and noise.

There were many mistakes made throughout the course of the afternoon and the consequences were great. This scenario identified issues of underage drinking, contributing alcohol to minors, public intoxication, and driving under the influence. Most importantly this scenario illustrates the lack of wingmanship.

Here are tips for responsible party planning:

- Plan ahead.
- Have a non-drinking designated driver.
- Limit drinking.
- Check identification to prevent underage drinking.
- Be a responsible host.
- Provide food, activity and oversight.
- Offer water and non-alcoholic beverages.
- Leave your vehicle at home.
- Know your guests.
- Ensure guests have a safe way home.
- Remember 0-0-1-3. That means 0 underage drinking, 0 drinking and driving, 1 drink per hour, no more than 3 drinks per sitting.
- Call a taxi or Airman Against Drunk Driving at your installation for a safe ride home.

CONTRACTS *from page 1*

ensure mission continuity. As protests are resolved and the new contracts are awarded, we will remove requirements from the ATA contract.

I have complete confidence in the integrity of our source selection process. Many of the participating companies and Department of Defense and Secretary of the Air Force-level acquisition staff members commended our Source Selection Team on how open and fair this competition was.

We are in the midst of a revolutionary change in the way we do business at AEDC. As we go through the coming months, I anticipate some bumps along the way. I know you will all do your part to make this transition successful to ensure we remain the nation's engineering development and ground test and evaluation facility of choice… today and tomorrow.

Thank you,
Col. Toth

In a previous email sent on June 8 by the AEDC Executive Director, Dr. Mark Mehalic, an update was provided for the three locally managed contracting efforts.

Team AEDC,

I have received word that our Facility Support Services (FSS) and Base Communications and Information Technology Services (BCITS) awards are delayed due to pre-award protests.

Our plan to award the Test Operations and Sustainment (TOS) contract is still on track for Wednesday.

As Col. Toth has told you in previous messages, the Technical and Management Advisory Services (TMAS) effort is delayed.

Many of you are wondering what we plan to do when award delays impact projected contract start dates. We will extend work on the ATA contract to ensure mission continuity for any efforts which are delayed.

Thanks for your continued dedication to the AEDC mission. We will keep you posted as these issues are resolved and awards are made.

Mark A. Mehalic, Ph.D.

Smoking Policy

1. The following revised AEDC smoking policy is effective immediately. Smoking is permitted solely in designated areas identified by a plastic "smoke genie." This receptacle is for the sole purpose of cigarette butt disposal. If there is no receptacle, smoking is not permitted in that area. It is the responsibility of all smokers to clean up the area surrounding the receptacles for any cigarette butts on the ground. Smoking in government-owned vehicles is strictly prohibited. Personnel are allowed to smoke in their personal vehicles at any time. Smoking areas will be held to the absolute minimum and will be located in low traffic, low visibility areas away from points of building ingress/egress and air intakes. A map of all authorized smoking areas is available on the Team AEDC SharePoint site. Smoking near a facility in an area not designated on the map is prohibited and any smoking receptacles located in areas not shown on the map will be removed. All "smoking permitted" and "no smoking" signs will be removed unless specifically required by OSHA.

The fact a person smokes has no bearing on the number of breaks they may take. Breaks should be taken in accordance with the company/agency personnel policies that apply to all employees.

Smoking, including the use of electronic cigarettes and smokeless tobacco, is prohibited in any area, at times when official business is being conducted with government clients, test customers, outside visitors and dignitaries, and where official business is being conducted including conference rooms, auditorium settings, business meetings, or in any other area where Air Force regulations specifically prohibit use. Containers of tobacco waste product, including selaed containers, must not be left unattended or disposed of in trash receptacles. Users of smokeless tobacco must flush tobacco waste down the toilet. Due to the nature, appearance, and safety concerns of electronic cigarettes (also known as "e-cigs"), the use of said products will abide by the same rules for tobacco products stated above and governed by AFI 40-102, *Tobacco Use in the Air Force*.

2. Supervisors at every level will ensure this policy is followed. Disciplinary action is appropriate for repeated violations.

3. Updates to this policy will be made in the future to further align with Air Force guidelines.

4. This policy remains effective until rescinded. (This policy is dated December 20, 2013)

Action Line

Team AEDC

I believe in free and open communications with our Team AEDC employees, and that's why we have the Action Line available. People can use the Action Line to clear up rumors, ask questions, suggest ideas on improvements, enter complaints or get other issues off their chests. They can access the Action Line in one of two ways: via the AEDC intranet home page, and by calling 454-6000.

Although the Action Line is always available, the best and fastest way to get things resolved is by using your chain of command or by contacting the organization directly involved. I encourage everyone to go that route first, then if the situation isn't made right, give us a chance.

Col. Raymond Toth
AEDC Commander

Turning challenges into opportunities hallmark of Wolfenbarger's tenure as AFMC commander

By Kim Bowden
Air Force Materiel Command Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio – After 35 years of service and three years at the helm of Air Force Materiel Command, Gen. Janet Wolfenbarger relinquished command during a ceremony on June 8.

Three weeks after she assumed command of AFMC in June 2012, Wolfenbarger said, "We have a responsibility to make our institution – our system – better so the people who come along after us can benefit from improvements to the way we accomplish our mission."

In looking at the changes to AFMC during her tenure, it is clear Wolfenbarger lived up to that responsibility.

"The AFMC reorganization from 12 centers to five centers was a major part of the Air Force's response to the Department of Defense budget challenges," the general said. "By consolidating overhead, we improved the way AFMC accomplishes our diverse mission, and that provides better support to the warfighter. Establishing a single center with a single commander for each primary mission has enabled us to standardize and continuously improve business processes across a mission enterprise, focused on achieving the art of the possible."

Gen. Janet Wolfenbarger relinquished command of Air Force Materiel Command during a ceremony on June 8. Wolfenbarger's 35-year career included several notable "firsts," including being a part of the first class of female cadets at the U.S. Air Force Academy in 1976 and becoming the first female four-star general in the Air Force in 2012. *(U.S. Air Force file photo)*

Most recently, the Air Force established AFMC's sixth and newest center, the Air Force Installation and Mission Support Center, which was formally activated on May 5, 2015.

"We determined there was merit in centralizing installation management functions that were previously executed in a decentralized manner across all of the major commands. Centralizing allowed us to realize synergies and reduce resourcing," said Wolfenbarger. "This was the biggest strategic initiative that was put on the table in response to the Secretary of Defense's mandate to reduce management headquarters by 20 percent. It allows us to provide more effective and efficient installation and expeditionary combat support capabilities to commanders and mission partners."

Making the most out of opportunity is not new for the general. Indeed, her entire career has been shaped by leveraging opportunities, often amid challenges – from the time she entered the U.S. Air Force Academy in 1976 until she became the first female four-star general in the Air Force.

"I never anticipated that my career would include a promotion to brigadier general, much less this opportunity to serve at the highest rank in our Air Force," Wolfenbarger said. "I was a member of the Academy's first class of female cadets, and my experience there really provided me with a foundation I've relied on throughout my career. The Academy put me in situations that stretched me mentally, physically, emotionally and academically. I came out on the other side of those experiences knowing I am far more capable than I ever thought I could be. That knowledge gave me a belief in myself that I have relied on ever since."

After graduation, Wolfenbarger began her career in acquisition as an engineer at Eglin Air Force Base, Fla. She held several positions in the F-22 System Program Office at Wright-Patterson AFB, Ohio, and served as the F-22 Lead Program Element Monitor at the Pentagon. Later, the general was the B-2 System Program Director for the Aeronautical Systems Center at Wright-Patterson. She also commanded ASC's C-17 Systems Group, Mobility Systems Wing.

She was the Service's Director of the Air Force Acquisition Center of Excellence at the Pentagon, then served as Director of the Headquarters AFMC Intelligence and Requirements Directorate. She served as AFMC vice commander from December 2009 to September 2011. Prior to her assignment as AFMC commander, Wolfenbarger was the Military Deputy in the Office of the Assistant Secretary of the Air Force for Acquisition at the Pentagon.

"I have spent my entire career working hard and doing the very best I could at every job my Air Force gave me," the general said. "That's the career advice I would give any Airman today: Work hard and do your very best in every job that you are given. Couple that with bringing a positive attitude with you to work every day. That's my simple recipe for success."

Looking forward, Wolfenbarger says she has mixed emotions. While she is excited about what comes next, she has truly enjoyed her time in service.

"It has been an absolute privilege to serve as commander of the very command I grew up in," she said. "I am so proud of our Airmen – both in AFMC and across our United States Air Force – and the remarkable work they do every day. I am honored to have served alongside these heroes for the past three and a half decades."

FELLOWS *from page 1*

Dr. John Felderman, AEDC Fellow

Dr. Grant Patterson, AEDC Fellow

Peggy Gray, AEDC Lifetime Achievement Fellow

Phil Tarver, AEDC Lifetime Achievement Fellow

included the development of a computer program to analyze boundary layer development; predicting the effects of seeded flow on model ablation; arc heater flow characterization; modeling of dust particle acceleration in the dust erosion tunnel; and the development of an ethylene burner for hot exhaust simulation in sub-scale models tested in the Propulsion Wind Tunnel 16-foot transonic wind tunnel.

Felderman returned to AEDC in 1981 after working as an associate professor in the mechanical engineering department at South Dakota State University. Upon his return he was involved in the development of defining the arc heater flow field and the design of the Complex's H2 and H3 arc heaters. He also contributed to code development for modeling in the H3 arc heater.

Felderman has collaborated with colleagues to research and write more than 50 publications on wind tunnel testing, heat and high pressure flows in arc heater technology.

Dr. Grant Patterson
AEDC Fellow

Patterson, a 2005 AEDC retired aerospace engineering specialist and consultant, is recognized as an AEDC Fellow for his contributions to turbine engine and aerospace aircraft systems during his 38-year service for the Complex. The nomination submitted for his selection noted his outstanding technical leadership and innovations and analytical skills.

Patterson lead the effort to establish a turbine engine augmentor test capability at AEDC and was the analysis engineer for engine tests involving systems such as the Pratt & Whitney F100, General Electric (GE) F110, GE F414 and others.

During the 1970s and 1980s he led the effort to analyze acoustic resonances in the Complex's turbine engine test cells to understand the effects on an engine during a test. And he also aided in developing the Nonrecoverable Stall program which defined engine stall characteristics to establish recovery techniques for an engine manufacturer.

His leadership involvement with the Snap-In/Snap-Out instrumentation capability helped save millions in instrumentation cost and has become a standard process between engine manufacturers and AEDC. The process streamlined the hookups between engine instrumentation and AEDC data acquisition ports.

Patterson has provided his analysis expertise to the development of a Best Practice publication for data validation in turbine engine test cells and to hypersonic aerodynamic tests.

Peggy Gray
AEDC Lifetime Achievement Fellow

Gray is the first female selected as an AEDC Lifetime Achievement Fellow for her outstanding financial leadership to AEDC and the Air Force during her 34-year career.

She retired in 2012 as the Financial Management (FM) deputy comptroller with the responsibility of overseeing approximately $400 million.

She began her career as a secretary in the in the Propulsion Wind Tunnel 4-foot transonic wind tunnel branch. Later, while serving as the secretary for the Test Operations technical director, she documented all recommended changes and prepared briefings gaining insight into the resource allocation process and sparking her interest in financial management.

By 1984, Gray was selected to be a budget clerk in the FM budget office and eventually a FM budget analyst in 1987. In her role as a budget analyst she was assigned responsibility over the Complex Test and Evaluation Support (TES) account where she facilitated customer-focused financial services and provided senior management with accurate and timely financial execution data.

She became a senior budget analyst in 1991 interfacing with internal and external customers on resource allocation matters. Gray ensured AEDC was compliant with U.S. Air Force and Command policies, issues and decisions.

After becoming the chief for the FM Analysis in 1995, she became the lead for the Capabilities Analysis Risk Assessment (CARA) team to drive AEDC resource allocation decisions in test capabilities. She led the team to avoid a $10.9 million budget reduction for AEDC in fiscal year 2005.

In June 2004, she was appointed as the FM deputy comptroller and later developed a new organizational structure providing better career paths and better professional development for FM personnel. Her innovative approaches resulted in gains in teamwork and efficiency and became the model for Command comptrollers.

Her leadership contributed to the successful accomplishments of numerous weapons systems testing critical to the national defense.

Phil Tarver
AEDC Lifetime Achievement Fellow

During a 35-year career at AEDC, Tarver captured iconic images in photographs depicting the Complex's dedication to developing the nation's aerospace superiority.

Tarver was the first photographer hired in 1954 to portray AEDC facilities and tests to the public including their unique and dramatic sizes and characteristics. His photos were human interest-based, to publicize the people at work.

He demonstrated a mastery of lighting, composition and public appeal by combining personnel – to establish scale and to provide a human touch – with strobe lighting to create the visionary photos that continue to grace AEDC publications, displays and websites.

Iconic photos such as the Propulsion Wind Tunnel 16-foot transonic tunnel plenum section "60-30" benefited from Tarver's creative ability to use lighting to portray the best image.

Images produced by Tarver provided a firm anchor point for the best publicity in recognition of AEDC within the Department of Defense, aerospace industry and technical community.

AEDC Fellow Program

The Fellow program was established in 1989 and recognizes AEDC individuals who have made exceptionally distinguished and substantial contributions to the nation's aerospace ground testing capability at the Complex.

Candidates considered for selection as an AEDC Fellow, an AEDC Craftsmen Fellow, AEDC Lifetime Achievement Fellow or AEDC Honorary Fellow are current or retired military, civilian and operating contractor and subcontractor personnel assigned or previously assigned to AEDC.

The AEDC Fellow Banquet is open to the public. To register for the banquet by the June 12 deadline, call 454-6505.

AEDC Fellow Banquet

June 25,
5:30 p.m.
Social Hour
6:30 p.m.
Dinner

At the Arnold Lakeside Center
(open to the public)
Cost is $30 per person
Attire is service dress for the military and coat and tie for civilians

Reservation deadline, June 12
Call 454-6505 for reservations

Suicide prevention discussion during Airman training

AEDC Commander Col. Raymond Toth (right) discusses suicide prevention with Airman at the Complex during training on May 8. The required suicide prevention training included the presentation of the acronym "ACE" on a resource card. "A" represented "Ask your wingman;" "C" represented "Care for your wingman;" and "E" represented "Escort your wingman." The acronym provided suggestions on how Airman should communicate with a fellow wingman as well as providing resources for assistance. ***(Photo by Jacqueline Cowan)***

TUNNEL *from page 1*

Lead project personnel involved in the modernization emphasized the importance of having the capabilities to fabricate and machine parts "in-house."

"We did the majority of it [the modernization project] in-house," said Jeff Harvey, machine planner for the AEDC Model Shop. "We do a lot of specific and specialty items that go into the test cells. Many of the craftsmen have 30 or more years of experience and not only experience machining but experience in making things that work."

Due to the synergy between the AEDC craft personnel, designers and engineers, the project progressed at a quick pace.

"We used what you call concurrent engineering on this, and that's working closely with design and engineering departments," Harvey said. "Because this [project] was made up of several assemblies…to go in a high tolerance assembly, that [project] couldn't be achieved as quickly as we did it without having help from the machinists, the design department and engineering department all working together to keep the job working – to keep it going."

The craft personnel worked closely with the designers, and that provided insight and more capabilities for the machine shop where maintenance may be needed later.

"We were able to use people's experiences to make ours [capabilities] better," said John Wright, project manager for the 4T Captive Trajectory System upgrade. "By using AEDC craft in the design, fabrication and installation process, they gained experience that will aid them in future maintenance and repair efforts."

Wright said the fabrication process "was definitely faster" due to the communication between craft personnel and design personnel who were closely located.

Greg Fox, the section manager of the PWT Operations Group, also emphasized the importance of an "in-house" fabrication for the project.

"Since the equipment is all one-of-a-kind and it's designed specifically for our use, it helps us tremendously to have our engineers and our craft, our people here at AEDC involved in the installation, checkout and fabrication," Fox said. "Because when it comes time to troubleshoot problems, to improve it next time, to work on it, to use it, we really understand what we have more so than if somebody were to just drop a turnkey system on us and we would have to start, at that point, learning."

The high quality of each project was due to design changes throughout the process.

Jeff Tate, a mechanical planner in the Model Shop, called the project unique because, "you didn't have to have the finished design" or "you didn't have to have everything completed to get started" on the fabrication.

"It's a design-build kind of process that makes AEDC unique," Tate said. "Also, the engineering folks are right here on base so they can work with us during the process. We can call and they can be here in 10 minutes to look at something, to discuss items."

COMMAND *from page 1*

changing command from one woman to another is interesting, and it's historic," he said. "But it's not as cool to me as the fact that we're changing from one phenomenal leader to another."

Welsh highlighted Wolfenbarger's career and acquisition expertise, and he thanked her for her service.

"Under Janet's sterling leadership, you have taken AFMC to new heights," Welsh said. "She always wants the focus to be clearly on the men and women who give this great command life. It's never, never been about her. But just once, before she retires, I believe it would be appropriate for the rest of us to acknowledge her truly monumental achievements."

Wolfenbarger said that it has been the honor and privilege of her career to have served as commander of AFMC, what she calls the "command she grew up in."

"I have spent the majority of my career in Air Force Materiel Command, and I couldn't be prouder of the missions we execute and the people in this command who execute them," she said. "I want to thank the entire AFMC team for their outstanding professionalism, hard work and dedication, and I am humbled by all you were able to accomplish on my watch. My final salute goes to you, with best wishes always from the Wolfenbarger family."

In introducing Pawlikowski, Welsh expressed his confidence that AFMC remains in great hands, saying that she is eminently qualified and ready for the challenge.

"Gen. Ellen Pawlikowski has a spectacular track record of success," he said. "She's smart, she's not intimidated by tough people or tough issues, and she is completely dedicated to the welfare of her Airmen and their families.

"Ellen, I ask that you take a look at the men and women in this command," Welsh continued. "The Secretary and I trust you to lead them. We need you to inspire them. And we expect you take care of them."

Pawlikowski thanked Welsh for entrusting her with the challenge and expressed her excitement at returning to AFMC.

"AFMC is my home. This is where I started my acquisition career, and I can't think of a greater opportunity for me than to lead the great team of Air Force Materiel Command," she said. "I have seen what the AFMC men and women can do, and I'm excited about leading and working with you all to make this the most agile Air Force we've ever seen."

After serving as the Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition at the Pentagon for the past year, Pawlikowski becomes the ninth AFMC commander since AFMC stood up on July 1, 1992. She will now lead a workforce of approximately 80,000 people and manage an annual budget of about $60 billion.

This day in espionage history

By AEDC Industrial Security

June 15, 1917 – Espionage Act of 1917 passed into law

Espionage Act of 1917
Originally intended to:

- Prohibit interference with military operations or recruitment
- Preven insubordination in the military
- Prevent the support of U.S. enemies during wartime

June 18, 2009 – Roy Lynn Oakley sentenced to six years in prison for unlawful disclosure of research development (RD) information.

June 20, 1986 – Robert Dean Haguewood sentenced to two years for selling part of a confidential aviation ordinance manual.

Women's AF history expands with new four-star

By Staff Sgt. Carlin Leslie
Secretary of the Air Force Public Affairs

Air Force Chief of Staff Gen. Mark A. Welsh III congratulates newly promoted Gen. Ellen M. Pawlikowski during her promotion ceremony June 1, at the Women's Memorial for Military Service in Arlington National Cemetery, Va. Pawlikowski is the commander of Air Force Materiel Command at Wright-Patterson Air Force Base, Ohio. *(U.S. Air Force photo/Scott M. Ash)*

WASHINGTON (AFNS) – In Air Force history a legacy has been written, by women, for women. The walls of the Women in Military Service for America Memorial are filled with stories of historic and iconic women from all U.S. military services that have served the nation.

History has once again been written. Those halls now hold a new story as Lt. Gen. Ellen Pawlikowski, the assistant secretary of the Air Force for acquisition, military deputy, was promoted to the rank of general, effective June 8. She is now the third female four-star general in Air Force history, following in the footsteps of remarkable women who paved the way.

"This is a great day for Ellen and (her) family (and) from my perspective it is a great day for the United States Air Force," said Air Force Chief of Staff Gen. Mark A. Welsh III. "(Secretary of the Air Force Deborah Lee James) and I expect an awful lot out of our four-star generals in the Air Force. We expect that they be able to defend the nation. We expect them to protect the institution and we expect them to lead, inspire and nurture the Airmen and families who give our institution life. We are extremely confident that Pawlikowski will do all those things."

Pawlikowski entered the Air Force in 1978 through the ROTC program at the New Jersey Institute of Technology and became the first female officer to receive a commission from that program. She went on to attend the University of California at Berkeley, and received a doctorate in chemical engineering in December 1981, and entered the active-duty Air Force in April 1982.

Through the guidance and honorable love of her mother, late husband, family, friends and Airmen she has led, Pawlikowski said there are three statements that define her.

"In the words of my mother, 'Just do the best no matter how hard it is, no matter how menial you think it is, just do the best that you can; and never quit,'" Pawlikowski said. "And from my late husband, the message of 'Do the right thing even when it's hard' resonates within me.

"Madam secretary, (Gen. Welsh,) you know you have my commitment and promise that I guarantee you that I will do the best that I can," Pawlikowski continued. "I will never, ever quit and I will do the right thing even when it's hard, because that's who I am."

The career of Pawlikowski has ranged from a variety of technical management, leadership and staff positions including command at the wing and center levels.

Continuing her career as a leader, Pawlikowski assumed command as the head of Air Force Materiel Command at Wright-Patterson Air Force Base, Ohio.

As she stood on the stage of the Woman's Memorial, in the presence of so many men and women who have defined history, Pawlikowski said she truly felt like she was standing on the shoulders of giants.

$2M Air Force Prize for development of a small, efficient turboshaft engine

By Wright-Patterson Air Force Base Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio (AFNS) – Registration is now open for the $2 million Air Force Prize that will be awarded to the first entrant to successfully develop a small, lightweight, fuel-efficient turbine engine.

"In order to continue to move forward and to ensure that our Air Force has the best technology available, it is imperative that we collaborate with industry and academia," said Secretary of the Air Force Deborah Lee James at the Bending the Cost Curve summit on Jan. 14. "The Air Force Prize is an exciting step in the right direction to encourage this kind of innovation."

The Air Force Prize is designed to spark American ingenuity by inviting a wide audience to compete, and to encourage innovative solutions to Air Force mission requirements beyond typical acquisition programs.

"Recent advances in materials and manufacturing techniques hold extraordinary promise for someone with a great idea and the ability to make it a reality," says Lt. Col. Aaron Tucker, the program manager of the Air Force Prize. "Rapid prototyping techniques like 3D printing can help produce a turbine engine that meets the performance criteria."

A successful 100-horsepower turboshaft engine must operate on Jet A fuel, demonstrate a brake-specific fuel consumption less than or equal to 0.55 pounds of fuel per horsepower per hour, and generate at least 2.0 horsepower per pound.

A team with the ingenuity to create this engine can submit performance data to the Air Force Research Laboratory (AFRL). A verification test will be completed in an AFRL test facility before the prize money is awarded. Detailed rules and performance criteria are available at ***www.airforceprize.com***.

AF Research Lab participates in DOD Lab Day

By Senior Airman Hailey Haux
Secretary of the Air Force Public Affairs Command Information

Second Lt. Anthony Eastin, behavioral scientist with the Air Force Research Laboratory, describes the capabilities of the Battlefield Air Targeting Man-Aided Knowledge (BATMAN) system, during the Department of Defense Lab Day at the Pentagon in Washington D.C. May 14. Lab Day showcases innovations from more than 60 Air Force, Army, Marines, Navy and Medical laboratories and engineering centers across the country. *(U.S. Air Force photo/Tech. Sgt. Dan DeCook)*

WASHINGTON (AFNS) – The Defense Department hosted the first ever DOD Lab Day in the courtyard of the Pentagon, May 14.

All services had booths, and one of the key organizations in the event was the Air Force Research Laboratory, showcasing an array of innovative technologies to the DOD's top leaders, scientists and engineers, the media, and select high school students.

"What we see today is innovation in the foreground," said Frank Kendall, the under secretary of Defense for acquisition, technology and logistics, during the opening ceremony. "We are in the pursuit of game-changing technologies ... things that are going to make the biggest difference to us on future battlefields."

The AFRL has roughly 5,700 scientists, engineers, researchers and supporting staff coming up with innovative technologies.

"The work we're doing is to provide the warfighter the technological edge," said Maj. Gen. Tomas J. Masiello, the AFRL commander. "We have three lines of operation, and one of those lines is revolutionary technology. These are technologies that are true game changers, and we like to highlight hypersonics, directed energy and autonomy. We think all three of those will play (a huge role) in the air superiority fight of the future."

The secretary of the Air Force talks about the Air Force powered by Airmen and fueled by innovation, and DOD Lab Day showed how innovation can be used as a tool to help the warfighters.

"We believe at Air Force Research Lab, we are the Air Force's center for innovation," Masiello said. "The way we view innovation is not new discovery, it's not new inventions, its taking those existing capabilities and packaging them in such a way that you have a brand new capability. We have a deliberate process to do that and we have a great track record of getting innovative technologies to the warfighter in efficient and effective means."

Among the many displays the Air Force had, one was called the Battlefield Air Targeting Man-Aided kNowledge or BATMAN.

"Our number one goal is to enhance the cognitive and physical performance of the warfighter," said 1st Lt. Caroline Kurtz, the human factors engineer for AFRL. "We are always trying to increase the mental and physical efficiency of our operators and increase their situational awareness. They have a lot going on, and we are trying to make it easier for them because it's a life-or-death situation for these guys."

Some of the technologies the BATMAN team showed off were the "bat hook" and "bat dock," both allowing devices to be mounted on a person, giving them more flexibility.

"Within the first two hours we were here, we had people coming up to us and told us that some of the tools we have are something they want to use," said 2nd Lt. Anthony Eastin, AFRL behavior scientist. "We're making connections and DOD Lab day allows all of us to talk to one another to essentially work together and increase synergy within the whole Department of Defense."

The AFRL and the other services were able to show off their work to a multitude of people with more than 5,000 attendees.

"Today is an opportunity to showcase our science and technology to Air Force leadership, and DOD leadership (among others)," Masiello said. "It's our opportunity to bring just a sampling of the research and development, scientific and technical research that we are doing and showcase it to folks."

Diamond in the rough: An Airman's recovery from his haunted past

By Staff Sgt. Derek VanHorn
35th Fighter Wing Public Affairs

MISAWA AIR BASE, Japan (AFNS) – Growing up, many of his childhood nights were spent staring through a gaping hole in his bedroom ceiling. He didn't know how it got there, but sometimes it served as a pleasant escape from the surrounding chaos. It gave access to the wide open Oklahoma sky and he positioned his mattress in the corner of the room to watch the stars crawl across it like snails.

He knew at some point the peacefulness would end. As darkness approached, the cockroaches would be out soon and the all-too-familiar sounds of their chomping jaws would be the ubiquitous chorus of the night. But even that was better than the worst nights.

"I was always more worried about getting wailed on for no reason at three or four o'clock in the morning," said Master Sgt. Vernon Davenport. "It happened once or twice a week."

There were too many of those nights, and the days weren't much different. He tried spending most of them doing normal kid things like hitting homemade ramps on his bicycle and laying pennies on the backyard railroad tracks. He learned quickly that if he slipped into the house unnoticed, he'd have a better chance of being left alone through the night.

He picked up a few other things along the way too, like how to roll a joint at four years old, how to chew tobacco, and that the burnt, bent spoons weren't to be used for eating.

Davenport describes his childhood, candidly and without pause, as "Lonely."

His mother, Martha, was a drug addict and was constantly loaded on whatever she could get her hands on. Men came and went with regularity, and the same went for houses. Moving from home to home was standard, and by ninth grade, Davenport switched schools six times.

He found normalcy only during summers, where he'd spend the few months with his grandparents, J.D. and Marie. It wasn't the ideal setting for a boy trying to find his way in life -- his grandma had double knee replacements that required almost constant assistance, and J.D. battled failing health from emphysema -- but Davenport made due. He pumped gas for minimum wage, and even with J.D.'s militant, no-nonsense attitude groomed from his days fighting in World War II and Korea, any time away from home was time well spent.

J.D. taught Davenport the tough way, but always made room for justice. If Davenport didn't know what a word meant, J.D. pointed him to a dictionary. If something broke, they'd head outside and get their knuckles dirty fixing it. He was a true guardian to Davenport, and when his grandpa succumbed to his smoking habit in 1995, Davenport was crushed. He'll never forget what those summers meant to him and the dread that followed with each of them ending.

The end of summer marked the beginning of school, which meant moving back in with Martha.

While his awkward, adolescent frame made him an easy target for bullies, school was an escape for Davenport. It offered a sense of belonging. He played the drums in band and stayed busy with sports to help stay hidden from home.

Martha was usually "zonked out on something" Davenport said, but she still always found ways to carry out her hidden aggressions on him. He was the oldest child of three and the only boy, which is why he assumes he took the brunt of the malice.

"Sometimes the school would call home about the bruises and burns on the backs of my legs," Davenport said. "But she always had an excuse. She'd use hangers, plastic combs, extension cords, cigarettes -- anything she could reach."

There was never any method to the madness; the severity just depended on the day. Davenport was treated more like a servant than a son, and on top of senseless beatings, Martha assigned him far from regular household chores.

If she wanted to bathe, it was his job to boil water on the stove and make trip after trip to fill the tub with warm water. One day, the 8-year-old's hands slipped and the results were scars that were more than just emotional. The searing water tore through his shoe and skin, causing second degree burns that left his foot permanently marred.

After he healed up, he was right back at it. Baths were only allowed every other day and everyone had to share the same water. When the bathtub was finally full after Davenport's labors, he was last in the pecking order to use it. At fifth in line, he refused to do anything but stand in the cold, filthy tub.

As much as he wanted to change things, he knew it might come at the cost of harming his two sisters. It was better that he just take the pain and punishment.

"My grandparents remember me trying to climb on my parents' laps and them just pushing me away," he said. "I was the ostracized child, for whatever reason. I guess I didn't fit in with them."

Over time, he adapted. He found a way to make it a game.

"All I could do was learn how not to cry in front of her so I could win the internal battle," he said. "It really pissed her off when I wouldn't cry."

He stopped calling her "Mom" along the way and only refers to her by first name. While winning against Martha felt good, it was only half the battle.

The man he called his father was a drunk. Jeff stood around six feet tall and pushed 400 pounds. Davenport dreaded hearing his footsteps coming down the hallway. He married Martha while she was pregnant with Davenport, and while he wasn't his biological father, he played the part in sparse attempts.

He was overly imposing and eventually became the reason Davenport found himself buried alone in the corner of his room, staring down the barrel of a loaded rifle.

Martha had run off with another man, and Jeff felt just enough responsibility to drag Davenport along as he fired up a relationship with a woman named Colleen. She served a handful of years as a pseudo-mother to Davenport but never really showed much interest. She had her own kids from a previous marriage, leaving him once again unclaimed and to the wayside.

One night while Colleen was away, Davenport was home alone with Jeff. He'd been obedient in relaying beer after beer to him as he barked commands while slouched in his recliner. When bedtime came, Jeff drunkenly coaxed the defenseless eighth-grader to his room and overpowered him with his massive frame.

"I wasn't big enough to do anything to stop it," Davenport said, stone-faced. "I froze. You know when they talk about people freezing during a rape? That happens."

When he came to his senses he stumbled to the bathroom, slammed the door, crumpled to the ground and cried. Only a two-inch thick door separated him from his surrounding hell. He never told anyone about that night. Like much of his life, he had no one to turn to.

Shortly after, his interest in life began to rapidly dissipate. The weight of what felt like a shameful secret weighed heavy on his mind and pushed him to a place he'd never been before.

"That's when I got a hold of a rifle and said 'I've had enough of this,'" Davenport said. He waited for a weekend when everyone was away from the home where he'd access the gun. He loaded it, flipped off the "safe" switch, bit down on the barrel and rested his thumb on the trigger.

"I don't know why I didn't do it," he said, shaking his head. "I had every intention to. I just never pulled the trigger."

He had hit rock bottom. Thankfully, the pick-me-up he needed was unexpectedly right around the corner.

That month, his middle school hosted a function featuring a motivational speaker. Davenport sat off to the side, detached and trapped in his own world. He remembers the days blending together in a fog, but in a single sentence, the speaker's words might've saved his life.

"He said, 'Suicide is a permanent solution to a temporary problem,'" Davenport remembers. "He talked about how someone always has it worse. I remember thinking, 'I don't know if anyone's got it worse,' but I decided to take those words to heart and hold onto them."

Davenport found a way to push through. When life took its swings, he always swung back.

"You endure," Davenport said. "Even at your lowest of lows, when you're under the rock, you have to keep trudging along."

He pressed on through high school as a multiple sport letterman and worked his tail off in the classroom, earning all A's on every report card. The little things still stung, like watching his buddies hop in cars with their families while he wheeled his bicycle to the street. But by now, he'd learned how to survive on his own. His arduous past conditioned him to face anything with stoicism, and his grandfather's discipline never left his side.

Before his junior year, he set his sights on the Air Force. He'd seen a video on medics and it was all he wanted to do.

"If I didn't join the military, I was going to run away," Davenport said. "There was no plan B."

Following graduation, his recruiter informed him he'd landed his dream job. He hopped in the car with him for the two hour drive to Oklahoma City and took his first airplane ride to San Antonio where he attended basic military training. In many ways, he was finally free.

Sixteen years later, he bounces around in his office with the enthusiasm of a lotto winner. As much as some might have tried to take it away, there's still a ton of kid left in him. He's now the first sergeant for the 35th Communications Squadron, a job specifically designed to help others.

He spent 14 years as a medic, where the service to others was similar at its core, even in the most grisly of situations.

"When you do eight deployments as a medic, you see a lot of nasty, horrible stuff," Davenport said. "It makes urgent care centers in the states look like a walk-in sick call. It's the most horrific thing you've ever seen in your life and you're helping these guys fight to survive. You can't describe it."

He said these grueling experiences have helped put his life and past in perspective. He's kept quiet about his past for nearly two decades. He didn't want pity for being dealt a bad hand in his childhood.

One thing that hit Davenport on a personal level was a video he watched of Air Force Chief of Staff Gen. Mark A. Welsh III giving a speech at the U.S. Air Force Academy.

Davenport said that Welsh talked about how every Airman mattered. How each member was a person rather than a number and how every Airman has a story to tell. The message convinced Davenport that his story, with hopes that it might help encourage others who have also reached dark, lonely places.

"I don't want people to treat me differently because of my past – you love people for who they are, not what they've been through," he said. "I just hope my example can help that one person that's struggling to get through something."

See **AIRMANN**, page 9

Kendall cites progress on F-35 performance, schedule, cost

By Cheryl Pellerin
DOD News, Defense Media Activity

A Luke Air Force Base F-35A Lightning II stands by to take off at Nellis Air Force Base, Nev., April 15. ***(U.S. Air Force photo/Senior Airman Thomas Spangler)***

WASHINGTON (AFNS) – The F-35 Lightning II program (also known as the Joint Strike Fighter program) is making progress on performance, schedule and cost, Frank Kendall, the undersecretary of defense for acquisition, technology and logistics, told U.S. reporters last week during a teleconference from Norway.

Kendall was in Oslo to attend the two-day F-35 CEO conference, an annual meeting in which senior U.S. government leaders, international partners and industry members discuss the F-35 program's status and strategic outlook. This was the first year a partner nation hosted the high-level meeting.

"We're continuing to execute to the (2011 F-35 Technical Baseline Review)," Kendall said, "and we're exceeding our expectations on cost and performance and we're close to our projections on schedule."

The undersecretary noted that there was a fundamental change in the direction of discussions at the Oslo meeting.

Focusing on the future

"We are not sitting here worried about the risk of completing baseline development," he said. "We're turning our focus much more toward fielding the program, upgrades in the future and getting whatever efficiencies we can going forward."

As she began the meeting, Norway's Defense Minister Ine Marie Eriksen Søreide used a phrase that Kendall quoted to members of the media as representing the status of the F-35 program.

"We're 'turning the future into the present,' she said, and I think the present is going to be much more about F-35 operations than it has been before. And we're looking forward to continuing to make progress in that regard."

Kendall said next year he hopes to hold the CEO meeting at the first operational base for the F-35, after the Marine Corps' F-35B reaches initial operational capability (IOC) later this year.

Initial operational capability

IOC refers to fielding F-35 squadrons capable of handling a range of combat missions. For the Marine Corps, Marine Fighter Attack Squadron 121, or VMFA-121, known as the Green Knights and based at Marine Corps Air Station Yuma, Arizona, will be the first F-35B operational squadron.

"We're on track to do that," Kendall added. "And we're on track to have Air Force IOC the following year and the Navy a couple of years after that, and our partners will start IOC-ing as well."

F-35 follow-on development was one of the meeting topics, he said.

"The threat constantly changes out there," Kendall said. "People develop weapons that they want to have integrated into the platform, and technology has matured that we want to insert into the platform, so we designed (the) F-35 so we can upgrade it throughout its lifecycle."

Changing threats

The baseline F-35 configuration, designated 3-F, was defined some time ago, he added.

Over the intervening time much has changed, the undersecretary said, "so we want to take advantage of more mature technologies … and we want to respond to threat changes – particularly in areas like electronic warfare – and we want to integrate newer weapons that are coming online."

Norway, Turkey and the United Kingdom also want to integrate weapons into the aircraft that were not part of the baseline, he said.

Integrating weapons

"The detailed planning for that was discussed and will take place over the next few months," Kendall said. The program, for some of the weapons, already has begun compatibility fit checks and other initial actions.

On the production side, Kendall said the attendees discussed the possibility of implementing what they called a block buy.

"We're not quite ready for a standard multiyear procurement yet, but we do think that starting in about fiscal year 2018, we'll be ready for a 3-year block buy that will require congressional approval," he said.

"We still have some work to do there but we're feeling optimistic enough about the program that we're going to proceed with the planning, and we'll be talking to Congress about it," he said.

Block buy

For partners and U.S. foreign military sales customers, commitment to such a block buy could save them money that Kendall said he'd like to see reach "double digits." Block buys will occur in fiscal years 2018, 2019 and 2020, he added.

On the support side, Kendall said, "the complexity and scope of the program is enormous, with all the international partners, with the different builds that we're fielding, the different IOCs that are coming on board, and we're starting to come to grips with how we're going to organize for that a few years ahead of us."

In all of these things, Kendall said, "whether it's development, production or support, the focus is on cost and driving cost down in the program and making the F-35 as affordable and cost effective as it possibly can be."

AIRMAN *from page 8*

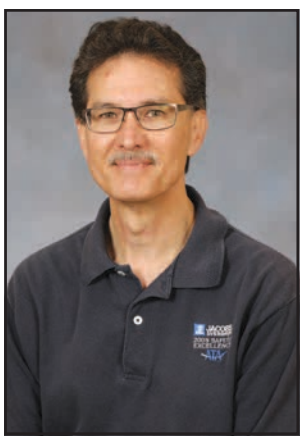
Now, he lives the role. His existence revolves around selflessness.

"Sometimes I forget I'm the first sergeant with rank, and I end up being the guy that's just there for someone," Davenport said. "I need to personalize with my people. I need to get down and get in the trenches with them. I owe them my sincerity."

Through all the years of rejection and trying to fit in where he wasn't wanted, he's finally found his home. The Air Force let him be himself. He admits the recovery process is constant and he's accepted the fact that some things will never make sense to him. But he said he feels whole. Something he never thought possible for so many years.

"It's made me a stronger person," he said. "Sure it sucked, and I wish it could have been different, but there's no reason to dwell on it. It's all made me who I am today."

Milestones



Kenneth Acuff

Bruce Dean
35 years, Plant Systems Design Section Manager
ATA Integrated Test and Evaluation Department

What is your most memorable AEDC moment during your years of service?

"When I started to work thirty-five years ago, I unknowingly joined the last rank of the "ARO Cats" to be hired at AEDC before the great contract split of 1981. I reported to the design section at the Model Shop back then and have remained in the design group throughout my career. Quite honestly, I cannot think of a better assignment to have at AEDC. Bringing new ideas to reality by preparing engineering analysis and drawings, working with those here who fabricate and install these ideas and seeing them in use provides a true sense of job satisfaction to me. Perhaps my most memorable moments were to be selected as the J and T Test Cell Design Team Leader in 1994, ETF A and B Plant "Self-directed Teams" Design Team Leader in 1996, and to be promoted to Section Manager of Plant Systems Design at the commencement of the ATA contract with responsibility for final approval of all design work that our section produced. Still, sometimes my thoughts drift back to that first summer of 1980 – a loud explosion that rocked our building, the adjacent woods ablaze, and AEDC fire trucks racing by on their way to a smothering APTU pebble bed. As we all watched this event unfold from our second story window, I remember wondering 'What on earth have I gotten myself into now?' The area was evacuated for this test and fortunately no one was injured in the aftermath."

Des Anderson
35 years, Engineer
ATA Test Assets and Support Department

What is your most memorable AEDC moment during your years of service?

"Just a few months ago, I received a phone call from someone who used to work with my dad, Andy Anderson. There was an effort to clean-out some areas of the VKF [von Kármán Gas Dynamics Facility] office building where dad worked several years ago before he retired. They ran across an old booklet with dad's name in it, and called to give it to me. It turned out that it was an old technical manual about shipbuilding design that dad had brought with him when he emigrated from Ireland in 1950. Sure enough, inside it was dad's signature with a hand written comment about how he thought the book was 'a bloody nuisance.' Yep – sounds like dad to me. Receiving that booklet was a memorable moment for me."

Randy Nicholson
35 years, Space Chambers Technical Lead Engineer
ATA Integrated Test and Evaluation Department

What is your most memorable AEDC moment during your years of service?

"I remember very vividly being at work at AEDC when three of our greatest national tragedies occurred: the shuttle Challenger explosion, the 9/11 attacks and the shuttle Columbia breakup. While these were all memorable but sad occasions, they also served as valuable reminders of why it is so important that all of us at AEDC perform our jobs well to keep our country strong and prevent such tragic events from occurring in the future."

35 YEARS
Kenneth Acuff, ATA
Bruce Dean, ATA
Des Anderson, ATA
Randy Nicholson, ATA

30 YEARS
Jimmy Sheppard, ATA
James Simmons, ATA
Alan Hale, ATA
Susan Drinnon, AF
Lee Chang, AF
John Lafferty, AF

25 YEARS
Stephen Arnold, ATA

20 YEARS
Frank Steinle Jr., ATA
Robert Petersen, ATA
Leonard Boyce, NAF
Holly Petty, AF

15 YEARS
Wayne Whittington, ATA
Christopher Davison, ATA
Brandi Harmon, ATA

10 YEARS
Nicholas Fredrick, ATA
Christopher Gipson, ATA
James Hall, ATA
John Krause, ATA
Lawrence Christian, ATA
Anthony Harrison, ATA
Daryl VanCise, ATA
Terrance Dubreus, AF
Thomas Lancto, AF

5 YEARS
Michael Tucker, ATA
Christopher Mathis, ATA
Bryan Larson, NAF

RETIREMENTS
Bob Lock, AF
Jack Walters, AF
Loretta Smith, AF
Kim Dawson, ATA
Larry Parks, ATA
Doyle Shettleworth, ATA
Jane Gray, ATA
Richard Hagar, ATA

INBOUND MILITARY
Capt. Andrew Fowler, AF
Lt. Col. Jeffrey Martin, AF

NEW HIRES
Andrew Hughes, AF
Aimee Honeycutt, AF
Nicholas Edwards, AF

PROMOTIONS
1st Lt. Joshua Coughenour to Captain
1st Lt. Chance Johnson to Captain
1st Lt. Samuel Stephens to Captain
1st Lt. Akshay Tripathi to Captiain

DEGREES
Shawn Wolfe, M.S. in Natural Resources and Environmental Sciences

Airmen bonded together by family, service

By Staff Sgt. Caleb Pierce
39th Air Base Wing Public Affairs

INCIRLIK AIR BASE, Turkey (AFNS) – Each month, the Defense Department and installations across the world celebrate the diversity that service members bring to the armed forces. For two Airmen here, not only did they celebrate their Hawaiian-Filipino heritage during Asian American and Pacific Islander Heritage Month in May, but they also celebrated their family and military bonds.

For Master Sgt. Chasitity Gullatt, the 39th Air Base Wing Equal Opportunity superintendent, this year's heritage month celebration was a little different then her previous ones. Unlike in the past, where she would celebrate with her friends and fellow service members, this year Gullatt celebrated with her brother, Staff Sgt. Bryant Guillermo, a 39th Security Forces Squadron vault storage area supervisor, who recently had a permanent change of station to Incirlik Air Base.

The month afforded both service members a chance to reflect on their heritage and remember why they joined the Air Force.

According to both Airmen, who are serving at the same base for the first time, the reason they joined the Air Force was inspiration from their father's service in the U.S. Army, as well as the opportunities and diversity it offered.

"I believe diversity is one of the greatest things that you can have in an organization; one person's strengths can be another person's weaknesses," Guillermo said.

Along with the influence from her father, Gullatt also stated that she was motivated to join to be the first female in her family to serve. Gullat also said that even though it was tough in the beginning being a female in the military, the experience has been overall beneficial due to the diversity and opportunities she has experienced.

"We all have one common goal and we all share the same core values," she said. "Being able to be a group of diverse people and still wear the same uniform is really an amazing feature the Air Force has to offer."

Master Sgt. Chasitity Gullatt, the 39th Air Base Wing Equal Opportunity superintendent, and her brother, Staff Sgt. Bryant Guillermo, a 39th Security Forces Squadron vault storage area supervisor, are stationed together at Incirlik Air Base, Turkey. This is the first time in their careers that they have been stationed together. *(U.S. Air Force photo/Staff Sgt. Caleb Pierce)*

On the other hand, Guillermo, prior to joining, lived in a small town in Kentucky with the rest of his Hawaiian-Filipino family. He said that he owes his career decision to his sister.

"Honestly, most of my life I have not had a plan," Guillermo said. "I went to a (college) open house, not realizing the financial obligations that underlie with it. Right after that I didn't know what I wanted to do and my sister (Gullatt) pushed me in the direction of the military."

Since Guillermo joined, he explained how much the military has helped him.

"I have had a lot of great opportunities to do and see things I would've never seen if I hadn't had joined," Guillermo said. "Travel was one of the biggest things I wanted to do."

Now that Guillermo is at Incirlik AB, he has been able to do some of the traveling he wanted and has gained a new perspective of being in the military with his sister.

Gullatt said that now that she and her brother are stationed together, it gives them a chance to share their Air Force experiences and knowledge.

"Being in different helping agencies helps us to see how things relate together," Gullatt said. "To be able to take care of him feels good. I think it's an awesome opportunity for him that we are able to be stationed together."

In the near future, Gullatt will PCS from Incirlik to her new duty station, while Guillermo stays behind to carry on the family legacy started by his sister.

AEDC Woman's Club receives scholarship donation

Teresa Abdellatif (fourth from left) with the Tullahoma Quarter Auctions for Charity presents a check for $1,023.50 to Cecelia Schlagheck (third from left) for the AEDC Woman's Club (AEDCWC) Scholarship Foundation. Also pictured, left to right, are AEDCWC members Sande Hayes, Liz Clouse-Jolliffe, Patti Mathis and Anne Wonder. AEDC Woman's Club members were the hosts for the May event and provided the food. Participants in the auction learned about products available from local vendors while having a chance to win products and services. AEDCWC Scholarship Foundation awards scholarships annually to six high school seniors from local area schools. For information about the AEDCWC call 455-3569 or 393-2552. *(Photo provided)*

Air Force's Space and Missile Systems Center Certifies SpaceX for National Security Space Missions

By Secretary of the Air Force Public Affairs

LOS ANGELES AIR FORCE BASE, El Segundo, Calif. (AFNS) – Lt. Gen. Samuel Greaves, Commander of the Air Force Space and Missile Systems Center (SMC) and Air Force Program Executive Officer for Space, has announced the certification of Space Exploration Technologies Corporation's (SpaceX) Falcon 9 Launch System for national security space missions.

SpaceX is now eligible for award of qualified national security space launch missions as one of two currently certified launch providers. The first upcoming opportunity for SpaceX to compete to provide launch services is projected to be in June when the Air Force releases a Request for Proposal for GPS III launch services.

"This is a very important milestone for the Air Force and the Department of Defense," said Secretary of the Air Force Deborah Lee James. "SpaceX's emergence as a viable commercial launch provider provides the opportunity to compete launch services for the first time in almost a decade. Ultimately, leveraging of the commercial space market drives down cost to the American taxpayer and improves our military's resiliency."

This milestone is the culmination of a significant two-year effort on the part of the Air Force and SpaceX to execute the certification process and reintroduce competition into the Evolved Expendable Launch Vehicle (EELV) program. The Air Force invested more than $60 million and 150 people in the certification effort which encompassed 125 certification criteria, including more than 2,800 discrete tasks, 3 certification flight demonstrations, verifying 160 payload interface requirements, 21 major subsystem reviews and 700 audits in order to establish the technical baseline from which the Air Force will make future flight worthiness determinations for launch.

"The SpaceX and SMC teams have worked hard to achieve certification, said Greaves. "And we're also maintaining our spaceflight worthiness process supporting the National Security Space missions. Our intent is to promote the viability of multiple EELV-class launch providers as soon as feasible."

Elon Musk, SpaceX CEO and Lead Designer, stated, "This is an important step toward bringing competition to National Security Space launch. We thank the Air Force for its confidence in us and look forward to serving it well."

The certification process provides a path for launch-service providers to demonstrate the capability to design, produce, qualify, and deliver a new launch system and provide the mission assurance support required to deliver national security space satellites to orbit. This gives the Air Force confidence that the national security satellites being delivered to orbit will safely achieve the intended orbits with full mission capability.

The SMC, located at Los Angeles Air Force Base, Calif., is the U.S. Air Force's center for acquiring and developing military space systems. Its portfolio includes GPS, military satellite communications, defense meteorological satellites, space launch and range systems, satellite control networks, space based infrared systems and space situational awareness capabilities.

Team Vandenberg launches its first-ever SpaceX launch from Space Launch Complex-4 Sunday, Sept. 29, 2013. 30th Space Wing's 1st Air and Space Test Squadron was the lead for all launch site certification activities at Vandenberg for SpaceX as an Evolved Expendable Launch Vehicle New Entrant. Under the authority of the Space and Missile Systems Center, the Squadron evaluated SpaceX's flight and ground systems, processes and procedures for this inaugural space launch campaign for the upgraded Falcon-9 rocket. *(U.S. Air Force photo/Airman Yvonne Morales)*

AF releases rocket propulsion system prototypes request for proposal

By Space & Missile Systems Center Public Affairs

LOS ANGELES AIR FORCE BASE, Calif. (AFNS) – The Space and Missile Systems Center (SMC) here released a formal solicitation June 2, seeking proposals for shared public-private investments in rocket propulsion system (RPS) prototypes.

This solicitation is part of a comprehensive Air Force plan to transition off the Russian supplied RD-180 propulsion system used on the Atlas V rocket by investing in industry launch solutions with the ultimate goal to competitively procure launch services in a robust domestic launch market.

The Air Force will award a portfolio of investments on a rolling basis in up to four of industry's RPS solutions. These investments, which will last approximately 12-18 months, will build the foundation for awarding separate investments in industry's launch system solutions and secure launch service commitments from invested companies.

Concurrently, the Air Force will continue to competitively award launch services contracts to certified providers who demonstrate the capability to design, produce, qualify, and deliver launch systems and provide the mission assurance support required to deliver national security space satellites to orbit.

"The end goal of our strategy is to have two or more domestic, commercially viable launch providers that also meet national security space requirements," said Lt. Gen. Samuel A. Greaves, the Air Force's program executive officer for space and the commander of SMC. "This is essential in order to solidify U.S. assured access to space, transition the (Evolved Expendable Launch Vehicle) program away from strategic foreign reliance, and support the U.S. launch industry's commercial viability in the global market."